SOME NEW ARCTIADAE.

By LORD ROTHSCHILD, F.R.S., Ph.D.

NOLINAE

1. Roeselia dognini spec. nov.

 \mathcal{S} . Resembles closely *divisa* Schaus, but outer half of forewing is grey, not black. Antennae greyish amber-brown; head and thorax amber-buff; abdomen somewhat paler.

Forewing: basal half amber-buff, with costal portion and a broad convex outer marginal band chocolate rufous; outer half greyish silver, a double waved and crenulated postmedian line sooty black, a very strongly convex waved and crenulated postdiscal line sooty black, four black streaks in costal area, and dark grey streaks on pale grey fringe.

Hindwing buffish grey-white satiny; fringe and outer margin grey, a cellular dot and postmedian shadow line also greyish.

Length of forewing: 12:5 mm. Expanse: 28 mm.

Hab. Cañon de Tolima, 1700 metres = 5500 ft., Colombia, December 1909 (A. H. Fassl).

2. Roeselia minuscula pura subsp. nov.

3. Differs from *m. minuscula* Zell, in the ground-colour being more silvery grey, less heavily marked with black, and has the dark costal patch more prominent.

Hab. Cañon de Tolima, 1700 metres = 5500 ft., Colombia, February 1910 (A. H. Fassl).

LITHOSIANAE

3. Nodozana subandroconiata spec. nov.

 δ . Antennae, head, tegulae, and patagia amber-yellow; thorax and abdomen cinnamon greyish buff, blackish marks on third and last segment and claspers of abdomen.

Forewings have a much-crumpled appearance owing to the large and weirdlyshaped and roconial patch on the underside; buffish golden-yellow, the basal fourfifths marked with pale brownish mauve.

Hindwings buff.

Underside uniform dark buff; the central third of forewing occupied by a large membranous deeply corrugated and irregular androconial organ sparingly clothed with androconial hairs; costal half of this organ dark dull brown, inner half dark buff, a dense felted androconial tuft at and on discocellulars.

Length of forewing : 11 mm. Expanse : 25 mm.

Hab. Cañon de Tolima, 1700 metres = 5500 ft., Colombia, January 1910 (A. H. Fassl).

4. Illice introbasalis spec. nov.

2. Antennae, head, and thorax dark bronze grey, tips of patagia cream buff; abdomen reddish salmon-colour.

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Forewing bronze grey; a patch of cream buff from base for two-fifths length of wing below median vein to inner margin, a narrow reddish-pink line on it at inner margin; a median band of cream buff with inner edge concave, outer edge straight.

Hindwing : basal three-fourths pale rose-pink, outer fourth bronze grey. Length of forewing : 6.5 mm. Expanse : 14 mm. Hab. Manaos, River Amazon.

ARCTIANAE

5. Prumala subtessellata spec. nov.

 \mathcal{S} . Differs from *tessellata* Schans by its black hindwings, by the green not black centre to the thorax, and the black patagia edged with green on the outside, these patagia being green edged with black in *tessellata*.

Length of forewing: 20 mm. Expanse: 46 mm.

Hab. Las Quiguas, near San Esteban, Venezuela (S. M. Klages).

6. Prumala tolimensis spec. nov.

 \mathcal{S} . Antennal shaft grey-brown, pectinations very long and less greyish; head orange golden, mixed with crimson near eyes; thorax orange golden, mixed with crimson scarlet in one \mathcal{S} , while in the second \mathcal{S} the whole thorax, except the tegulae and shoulders, is deep maroou crimson; abdomen orange golden, much mixed with crimson.

Forewing golden yellow; basal two-fifths obliquely sooty purple except costa, which is golden yellow with a scarlet splash; inside this dark area are two golden oblong spots ringed with scarlet, and it is outwardly edged with scarlet; from the dark basal area about the centre of vein 2 there runs up to the costa a broad band of sooty purple produced in a blant broad tooth towards termen along and above vein 5; within the band are scarlet nervular streaks as well as towards termen; along and below costa some scarlet dots and one at tornus; some dots in and around cell and a subterminal row of similar dots purplish grey.

Hindwing golden buff, washed with pale crimson on inner half.

Length of forewing: 23 mm. Expanse: 52 mm.

Hab. Monte Tolima, 3500 metres = 11,400 ft., Colombia, February 1910 (A. H. Fassl).

7. Amaxia peruana spec. nov.

9. Antennae black-brown, anterior fifth of shaft and pectinations yellowish grey; head golden yellow, a black spot on vertex; thorax golden yellow, centre of patagia, metathorax, and patch near juncture of abdomen brownish plum-purple; abdomen crimson, with some indistinct yellow marks.

Forewing golden yellow; four patches in basal area greyish purple ringed with black and narrowly with scarlet; an antemedian highly irregular oblique band narrow at costa but widening to three-fifths of wing on inner margin, greyish purple edged brokenly with black and scarlet, two spots within this band yellow and scarlet, and nervures mostly scarlet; a similar band beyond the basal two-thirds of wing from costa to above vein 4, a terminal and subterminal row, and a number of discal spots dull greyish purple. Hindwing yellowish buff suffused with pink.

Length of forewing: 19 mm. Expanse: 43 mm.

Hab. Sto Domingo, Carabaya, 6000 ft., S.E. Peru, January 1903 (G. Ockenden).

8. Paranerita metapyrioides spec. nov.

3. Differs from *metapyria* Dogn. in the outside edges of the oblique basal three-fifths of the forewing, the edges of the subapical patch and middle third of costa being golden yellow, not deep orange, and the hindwings being buffish golden **not** fiery orange.

Length of forewing: 21 mm. Expanse: 46.5 mm.

Hab. Muzo, Rio Cantinero, 400 metres = 1300 ft., Colombia (A. H. Fassl).

9. Automolis schausi spec. nov.

9. Differs from *elissa* Schaus in the much darker cream-yellow **not** creamwhite colour of the wings, in the black spots on the tegulae, in the black spot on the front of the thorax, in the two rows of lateral black spots on the abdomen, and in the white spot on the third segment of the abdomen.

Length of forewing: 29 mm. Expanse: 65 mm.

Hab. Sita, Costa Rica (W. Schaus).

10. Automolis sordidipennis spec. nov.

9. Allied to ventralis Schaus.

Pectus orange; antennae black; head and thorax black, tegulae and patagia cream-coloured, narrowly edged with black; abdomen black, anal segment orange, with the dorsal portion of basal third black.

Forewing dirty monse-grey; nervures brown-grey; base suffused with greyblack.

Hindwing purer grey, disc of wing more whitish, nervures only slightly darker. Length of forewing: 28 mm. Expanse: 63 mm.

Hab. Las Quiguas, near San Esteban, Venezuela (S. M. Klages).

11. Automolis fulminans spec. nov.

2. Allied to *flammans*, subflammans, and *perflammans*, but nearest to the last in depth of colour.

Pectus, head and thorax orange scarlet, black dots edged with white on tegulae, shoulders of patagia and two spots on metathorax white; abdomen, basal half crimson, anal half reddish orange.

Forewing rufous cinnamon suffused all over with crimson; nervures brighter crimson, in basal fourth above vein 1 the nervures and interspaces streaked alternately with deep crimson and dirty white; in basal half of wing a spot at base, three above vein 1, two larger and two smaller below vein 1, two large spots in cell, and three on costal area pure white; beyond the cell between veins 4 and 7 is a large irregular, almost semivitreous, white patch containing in it eight crimson dots, this patch is much smaller than in the three allied species; fringe and costal edge brick-red.

Hindwing rose-crimson or deep salmon-red, veins darker. Length of forewing: 33 mm. Expanse: 75 mm. Hab. South Brazil.

12. Automolis catharinae spec. nov.

3. This species is intermediate between *diluta* Feld. and *rectiradia* Hmpsn. Palpi and frons brown; antennae black; head and tegulae cream yellow, the latter brown on inward two-fifths, thus forming large brown median patch; thorax blackbrown, patagia bright pink edged with yellow; abdomen black-brown.

Forewing with deep black-brown basal patch, paler brown along the oblique outer edge; costal area from apex to basal patch broadly creamy yellow, from which runs a wedge-like antemedian band to inner margin where it is narrowest; this antemedian band is contiguous to outer edge of basal patch; a longitudinal somewhat oblique cinnamon-brown line starting from basal patch and crossing the antemedian line runs along median nervure, and vein 4 reaches termen at vein 6; rest of wing umber-brown washed strongly with grey.

Hindwing: base and part of cellular discal area almost semihyaline whitish cream, rest umber-brown washed with grey.

Length of forewing: 22.5 mm. Expanse: 52 mm.

Hab. Sta Catharina, Brazil.

13. Baritius palmeri spec. nov.

 \mathcal{S} . Pectus and forecoxae crimson scarlet; antennae, head, and thorax deep black with a sating sheen which has a brownish plum-purple gloss; abdomen deep velvety black, anal tuft and outer half of anal segment bright yellow, on the sides are traces of red hairs in the same position as the lateral stripes in *B. superba* Schaus, a patch of yellow hair at base of abdomen on the underside.

Forewing leaden grey-black glossed with brownish plum-purple, a slight antemedian band, a heavy median band, and a postmedian broken band of three patches deeper black.

Hindwing : hyaline white, nervures black, apex and tornus very widely black, rest of termen narrowly black.

Length of forewing: 23.5 mm. Expanse: 53 mm.

Hab. San Antonio, W. Colombia, 5800 ft. December 1907 (M. G. Palmer).

14. Ischnocampa tolimensis spec. nov.

J. Antennae bronze-brown; head pale wood-brown; thorax deep chocolatebrown, portion at juncture with abdomen pale wood-brown; abdomen dark sooty brown.

Forewing almost hyaline pale grey; costal area, termen, nervures, and all below vein 1 bronzy brown-grey; some scattered spots on nervures, termen, costa and inner margin chocolate-brown.

Hindwing almost hyaline pale grey, costa and termen very narrowly darker grey.

Length of forewing: 17.5 mm. Expanse: 39 mm.

Hab. Monte Tolima, 3200 metres = 10,400 ft., Colombia, January 1916 (A. H. Fassl).

15. Opharus albijuncta spec. nov.

J. Palpi, antennae, and frons liver-brown, vertex white; thorax liver-brown, patch near juncture with abdomen white; abdomen pale liver-brown.

Forewing pale liver-brown densely irrorated with darker brown specks.

Hindwing semihyaline pale liver-brown irrorated with dark brown specks, more densely on outer half of wings.

Length of forewing : 26 mm. Expanse : 56.5 mm.

Hab. Monte Tolima, 3200 metres = 10,400 ft., Colombia, January 1910 (A. H. Fassl.)

16. Opharus colombiana spec. nov.

2. Palpi dark brown; antennae and head wood-brown; thorax wood-brown with three lateral black dots; abdomen yellow with transverse black bands, basal half clothed with long paler wood-brown hairs.

Foreuing wood-brown, veins darker brown; a shadowy darker discocellular bar. Hindwing paler semihyaline wood-brown.

Length of forewing: 29 mm. Expanse: 64 mm.

Hab. Cañon de Tolima, 1700 metres = 5500 ft., Colombia, March 1910 (A. H. Fassl).

17. Opharus aureopuncta spec. nov.

S. Antennae, head, and thorax dark mummy-brown; palpi with pale yellow patches; head and thorax mixed with a few yellow hairs; abdomen, basal twothirds mummy brown, apical third crimson with three dorsal black dots.

Forewing dark mummy-brown densely sprinkled with pale yellow dots; along costa five larger spots, two subterminal rows of spots, an irregularly scattered number of discal spots, and the fringe-chequers also pale yellow.

Hindwing: basal two-thirds semihyaline greyish buff, with a large arrowshaped mummy-brown patch under costa; outer third mummy-brown dotted with minute pale yellow dots and one larger dot above vein 5; abdominal area to vein 2 clothed with long pale pink hairs among which are a few grey ones. A second \mathcal{S} has the larger pale yellow spots in forewing much reduced in size and number.

Length of forewing: 26 mm. Expanse: 58 mm.

Hab. Monte Tolima, 2700 metres = 8800 ft., Colombia, February 1910 (A. H. Fassl).

18. Opharus irregularis spec. nov.

2. Palpi orange; a black streak on outside of second, and a black spot on third segment; antennae amber-brown; head cream-colour, frons mixed with a few black hairs, vertex with black spot; thorax cream-colour, three washed-out yellowish brown smears on patagia; abdomen cream-colour, basal two-thirds clothed with long brownish cream hairs.

Forewing gallstone yellowish brown, divided into eleven transverse highly irregular and serpentine bands by five transverse bands of cream-colour; the six resulting gallstone yellowish brown bands are in places suffused with darker, more liver-brown.

Hindwing: basal two-thirds semihyaline cream-white, outer third dirty pale wood-grey, with a semihyaline subterminal line; abdominal area to vein 2 clothed with long rough cream-coloured hair.

Length of forewing: 32 mm. Expanse: 71 mm.

Hab. Monte Tolima, 3200 metres = 10,400 ft., February 1910, Colombia (A. H. Fassl).

19. Hemihyalea lehmanni spec. nov.

9. Antennae yellowish cinnamon-brown; head frons cinnamon-buff; vertex yellowish cinnamon-brown; thorax and abdomen yellowish cinnamon-brown; anal segment grey, anal tuft buff.

Forewing semihyaline pale rusty yellowish cinnamon-brown, almost completely clothed with scales on costal and inner areas and terminal fourth of wing.

Hindwing semihyaline brownish cinnamon-yellow.

Length of forewing : 35 mm. Expanse : 79 mm.

Hab. Popayan, Colombia (Lehmann).

20. Hemihyalea ferreobrunnea spec. nov.

J. Forelegs cream-buff; palpi rusty chocolate, cream at tips; head, frons cream, vertex rusty cinnamou-chocolate; antennal shaft grey, long pectinations cinnamon-chocolate; thorax cinnamon-chocolate; abdomen pale cinnamon-chocolate; last four segments dark sooty-brown with lateral grey spots, claspers cinnamon-buff.

Forewing: basal, costal and inner areas and terminal fourth of wing rusty cinnamon-chocolate; whole disk hyaline very slightly powdered with rusty cinnamon-chocolate scales; nervures rusty cinnamon-chocolate.

Hindwing almost hyaline, abdominal and terminal areas and nervures pale cinnamon yellowish brown.

2. Differs in the abdomen being almost as dark as thorax, and only the last two segments are pale grey, not as in \mathcal{J} the four last sooty-brown.

Length of forewing: 3, 36 mm.; 9, 35 mm. Expanse: 3, 80 mm; 9, 77 mm. Hab. Monte Tolima, 2800-3200 metres = 9100-10,400 ft., January—February 1910, Colombia (A. H. Fassl).

21. Hemihyalea subtenuimargo spec. nov.

3. Closely allied to *tenuimargo* Dogn. Forelegs cream-white in front; head, frons cream-buff, vertex maroon; antennae brown; thorax maroon, collar and shoulders cream-buff; abdomen rosy carmine.

Forewing hyaline, slightly obscured here and there by a few brown scales; basal, costal and inner areas golden brown; terminal area deep brown.

Hindwing hyaline, terminal margin pale grey-brown, abdominal area clothed with satiny buffy yellow hairs.

Length of forewing: 34 mm. Expanse 75 mm.

Hab. Monte Tolima, 3500-3800 metres = 11,300-12,400 ft., February 1910. Colombia (A. H. Fassl).

22. Amastus watkinsi spec. nov.

?. Pectus orange; palpi orange with two black spots; head black, white, and orange; antennae black, thorax orange; tegulae, front half white, hinder half orange edged with black; patagia white, centre orange edged with black; abdomen orange yellow, a lateral band of white above and below which runs a series of black spots, those above with white, those below with orange centres.

Forewing semihyaline cream-white, strongly suffused with cinnamon on basal half of inner area and terminal fourth of wing, nervures black; an orange spot at base, a broad antemedian band preceded closely by a narrow one, together one-

fifth of breadth of wing, sooty brown ; an irregular broad postmedian band followed by three crenulate waved lines all sooty brown.

Hindwing semihyaline, buffish white, veins and part of termen grey.

Length of forewing: 32 mm. Expanse: 71 mm.

Hab. Uruhuasi, S. Peru, 7000 ft., April-May 1910 (H. and C. Watkins).

23. Amastus tolimensis spec. nov.

2. Head, antennae, palpi, pectns, and thorax umber-brown; abdomen slightly paler and basal half clothed with yellowish umber-brown hairs.

Forewing semihyaline cinnamon rufous brown, outer third of wing dark semihyaline chocolate with a band of cinnamon rufous traversing it, discocellular bar and patch below median nervure also semihyaline chocolate.

Hindwing semihyaline yellowish cinnamon, terminal line and dense hair of abdominal area yellowish cinnamon brown.

Length of forewing: 38 mm. Expanse: 83 mm.

Hab. Monte Tolima, 2800 metres = 10,750 ft., February 1910, Colombia, (A. H. Fassl).

24. Amastus debilis spec. nov.

2. Palpi outside crimson tipped with testaceous cinnamon; antennae, basal third dirty grey, apical two-thirds amber brown; head and thorax testaceous cinnamon; abdomen greyish cinnamon; edge of anal segment buff.

Forewing hyaline; costal, and inner area below vein 1, basal area and fringe yellowish testaceous cinnamon, subterminal area thinly scaled with brown scales.

Hindwing hyaline; basal, costal, and terminal areas yellowish testaceous cinnamon, abdominal area clothed somewhat sparsely with silky yellowish cinnamon hairs.

Length of forewing: 29-32 mm. Expanse: 65-79 mm.

Hab. Merida, Veneznela (Briceño).

25. Amastus vitreata spec. nov.

9. Palpi sooty chocolate-brown; antennae umber-brown; basal third of shaft sooty black; pectus, head, and thorax dirty milk-white; patagia with dull orange median band; abdomen pale leaden grey; basal three-fourths clothed with long greyish cream hairs, anal ring white.

Fore- and *hindwing* hyaline, costal, inner and terminal edges cream-buff in forewing, cream-white in hindwing, abdominal area of hindwing with creamy white hairs and scales.

Length of forewing: 32 mm. Expanse: 72 mm.

Hab. Monte Tolima, 3200 metres = 10,400 ft., Colombia, January 1910 (A. H. Fassl).

26. Halisidota tolimensis spec. nov.

S. Palpi chocolate sooty brown; head milk-white; antennae dark brown; thorax cinnamon-brown; abdomen brownish cinnamon-grey, basal two-thirds clothed with long pale cinnamon-brown hairs, claspers pale cinnamon-brown.

Forewing: basal two-thirds between vein 1 and subcostal nervure almost hyaline white, rest of wing yellow, thickly but unevenly powdered with single brown scales, discocellulars brown.

Hindwing semihyaline pale sulphur yellow, much more thickly scaled on outer third of wing.

2. Similar, but thorax darker, basal two-thirds of forewing not even quite semihyaline, and abdomen glossy black, ringed with grey and practically without scales on anal half and clothed on dorsal part of basal half with long dark brown hairs.

Length of forewing : 3 33-35.5 mm.; 2 35-36 mm. Expanse : 3 75-80 mm.; 2 78-80 mm.

Hab. Monte Tolima, 3200-3500 metres = 10,400-11,375 ft., Colombia, January—February 1910 (A. H. Fassl).

27. Halisidota cirphoides spec. nov.

3. Palpi brown; antennae amber-brown; head and thorax dark golden buff, patagia suffused with pale brown; abdomen brownish golden buff.

Forewing straw-yellow, veins darker ; a shadowy violet grey-brown somewhat broken line from base through middle of cell to vein 6 before subterminal row of dots, where it is abruptly angled upwards and proceeds to apex as a wide brown band, a subterminal row of shadow dots leaden grey, termen brown.

Hindwing satiny semihyaline buff.

Length of forewing: 22.5 mm. Expanse: 51 mm.

Hab. Monte Tolima, 3800 metres = 12,300 ft., Colombia, February 1910 (A. H. Fassl.).

28. Diacrisia decemmaculata spec. nov.

 δ . Pectus golden; palpi yellow with black tips; antennae testaceous buff; head golden yellow; thorax buffish grey; tegulae golden, a black spot on the patagia; abdomen buffish golden, two basal segments buffish grey.

Forewing grey, a black spot at end of cell and a somewhat smaller one above vein 4.

Hindwing more thinly scaled greyish white, a black spot at end of cell and a minute black dot above vein 5; a similar dot is present on the underside below vein 2, but only faintly shows through above; buff hairs in abdominal area.

Length of forewing: 16 mm. Expanse: 36 mm.

Hab. Ubanghi River, Congo Free State.

29. Estigmene stygioides spec. nov.

δ. Antennal shaft dark brown, long pectinations black; head orange; thorax cinnamon orange-brown; abdomen orange ringed with black, black patch on anal segment.

Forewing brownish cinnamon-orange.

Hindwing semihyaline whitish grey on basal two-thirds, outer third and abdominal area sooty grey-black.

Length of forewing: 13.5 mm. Expanse: 31 mm.

Ilab. Abiusi, River Benue, Nigeria, September 9, 1912.

The types of all the 29 species described above are in the Tring Museum.